

CONCRETE CONSTRUCTION

ANNUAL INDEX 1972

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ARCHITECTURAL CONCRETE	
Weathering of Concrete	
Part I: The Weathering of Concrete. The importance of design details and correct materials in relation to climate, location and function. (4 pages)	Jan. 2
Part II: Designing Concrete for Weathering. Water flow, finish, joint spacing, steel cover and exterior detailing considerations. (4 pages)	Feb. 50
Part III: Constructing Concrete for Weathering. Reasons why the contractor should be brought into the design team early. (5 pages)	March 113
Can We Get Rid of Bugholes?	
By: Thomas J. Reading Some immediate practical measures for minimizing their frequency or possibly eliminating them. (4 pages)	June 266
What Architects Are Thinking About	
Architectural Concrete	
Different approaches to successful architectural concrete. (6 pages)	Oct. 483
Field Practices for Architectural Concrete — A Special Issue	
Costs, need for planning, finishes, mix design, placing and compacting, reinforcement, forming materials and details, mechanical finishing, and corrective action for defects. (23 pages)	Nov. 523
Architectural Surfaces by Shotcreting	
Formed and hand finished surfaces can be produced on opposite sides of a wall. (3 pages)	Nov. 586
CEMENT	
New Materials in Concrete Construction	
Part I: Notes from the Engineering Conference at the University of Illinois on expansive cements, fiber-reinforced concrete, regulated-set cements, synthetic aggregates, polymer concrete, polymer latex-modified mortars, ferrocement. (6 pages)	June 271
Part II: Answers to outstanding questions asked at the University of Illinois Engineering Conference. (7 pages)	July 333
COMMUNICATIONS	
International Directory of English Language Concrete Magazines. (5 pages)	June 279
Your Construction Library	
A listing of publishers and some recent titles of interest. (4 pages)	Dec. 605
CURING	
Liquid Membrane Curing Compounds	
By: Mahfouz Doss Pertinent facts about specifications, types, timing of application, costs. (3 pages)	May 218
CUTTING	
Diamond Core Bore Bit Used to Drill Post Holes	
Accuracy of alignment, speed of drilling and simplicity of technique are pluses for the method. (2 pages)	Jan. 13
DESIGN	
Revised ACI Building Code	
A major revision and modernization has been made of almost every aspect of the previous code. (2 pages)	Jan. 7
Concrete High-rise Apartments	
By: Eugene P. Holland Design considerations and construction practices that will keep tenants happy. (2 pages)	Feb. 55
Flat Plate/Pipe Column Structure for Low- and Medium-rise Buildings	
By: Frederick P. Wiesinger and Eugene P. Holland Procedures for the use of thin reinforced flat plates supported on pipe columns hidden within partitions. (4 pages)	Aug. 380
DETERIORATION OF CONCRETE	
Why Does Some Concrete Fail?	
By: Richard Mielenz Symptoms and causes of some kinds of damage. (3 pages)	Sept. 431
FORMING	
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Special considerations were required in the construction of this half-mile-long tunnel. (3 pages)	Jan. 9
World's Largest Chimney	
Each of 4,000 truckloads of concrete was tested to ensure compliance with specifications. (2 pages)	Jan. 19
Permanent Forms for Bridge Deck Construction	
Simplicity, safety and speed of construction are attributed to the use of permanent steel forms. (2 pages)	Feb. 61
Techniques for Ganging and Flying Long Pan Forms	
A pictorial explanation of a new approach that is of economic benefit. (3 pages)	March 109
System for One-step Casting of Concrete Structural Walls	
Finished walls for an entire apartment building cast in one day. (1 page)	May 223
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Vibration Control for Power Generator Foundation	
Spring-supported foundation table provides for low-level vertical vibration to counter horizontal vibration. (1 page)	Jan. 21

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With cement usage increasing and older kilns shutting down, a cement shortage is coming. (6 pages)	April 173	Longer Span Highway Bridge Girders				MASSIVE CONCRETE Graving Dock Erected		Post-tensioned girders for 180-foot spans to meet new traffic safety requirements. (2 pages)		Ninety percent of the concrete was placed between October and January, sometimes at temperatures of only 10 degrees F. (3 pages)	Jan. 15	May 240		MATERIAL HANDLING				The Role of Admixtures in Pumping Concrete		RECREATIONAL USES		By: Melville E. Prior				Air-entraining agents, retarders and recently developed pumping aids allow virtually any mix to be pumped. (3 pages)	Feb. 57	Leakproof Joints in Swimming Pools		REPAIR		Pumps, Materials and People		Repair of Fire Damage		By: Jim Germany		Part I: Concrete Structures After Fires. How can the owner and his agents make a first quick but objective appraisal? (4 pages)	March 99	One of the nation's most successful concrete pumping contractors provides insight into his operation. (6 pages)	Aug. 385	Part II: Evaluating Fire Damage to Concrete Structures. Field and laboratory methods useful for assessing conditions. (6 pages)	April 154	Transporting and Handling Concrete		Part III: Reinstating Fire-damaged Structures. Suggested techniques for repair following various types of fire damage. (5 pages)	May 225	By: William C. Panarese				Part I: The Proper Use of Truck Mixers, Hoppers and Chutes. (6 pages)	Aug. 370	Repair of Architectural Cast-in-place Structural Concrete		SAFETY		Part II: Buckets, Cranes, Carts and Wheelbarrows. The kinds of equipment available and how to use them. (5 pages)	Sept. 426	Effective Repairs for Leaking Swimming Pools		Bothered by OSHA?		Part III: Belt Conveyors. Inexpensive, versatile machines move concrete in quantity even where space is limited. (4 pages)	Oct. 479	Locating and diagnosing leaks; methods of repair. (4 pages)		What the contractor can do about administrative safety standards until we get something better. (3 pages)		Part IV: Pumps, Pipelines and Accessories. Pumps operate with pistons, pneumatic power or mechanical squeezing of a confined tube. (4 pages)	Dec. 594	Dec. 601		New Method of Transporting Concrete		TESTING		From ground level to any floor of a high-rise building. (1 page)	Aug. 418	Storage of Samples of Fresh Concrete by Rapid Freezing		VIBRATING		PAVING		A Workman's Guide to Vibrating Concrete		Fibrous-reinforced Concrete Performs Well in Airfield Pavement Tests		Practical instructions for effective use of vibrators. (5 pages)		Fibers provide reinforcement at all locations in all directions to reduce deterioration. (2 pages)	March 119	Sept. 437		A System for Constructing Post-tensioned Pavements				Prestressed paving with full scale equipment may now be practical. (4 pages)	Oct. 475		
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